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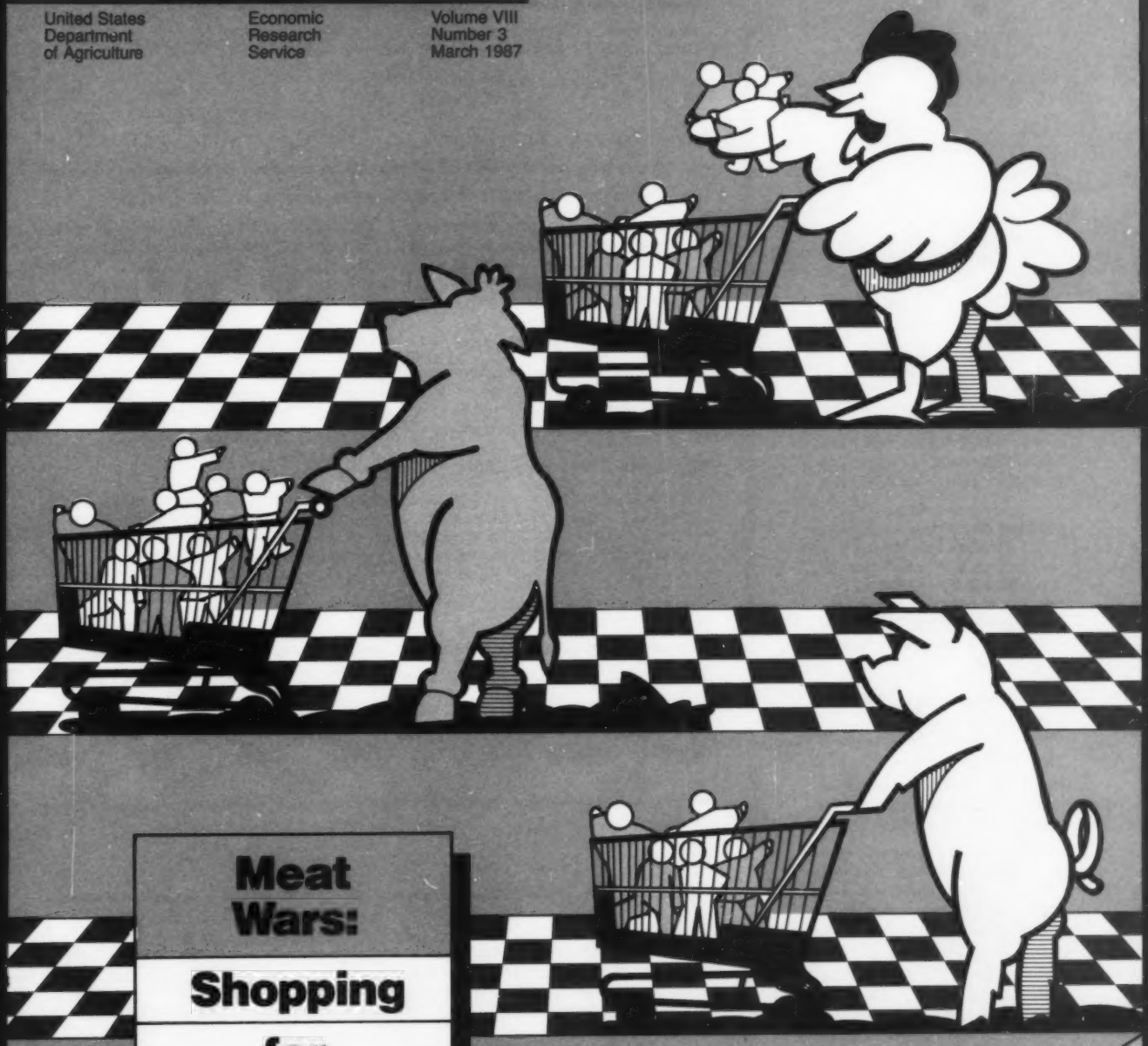

Meat Wars: Shopping for Consumers

Are Weather Patterns Changing?
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TAKE PRIDE IN AMERICA

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Poultry, beef, and pork are battling for the hearts and stomachs of American consumers, and they're doing it with new products, leaner cuts, and Madison Avenue flourish. How do these meats now rank in pounds consumed, why is poultry still scoring large gains, and what strategies will beef and pork producers use to win back some lost loyalties?

Signs of a Shift in Weather's Behavior *by Wendy Pinchas* 6

Some farmers are asking if weather hasn't become a bit more temperamental in the last decade, and some experts say they could be right. There's evidence of more erratic behavior and more extremes, from higher highs and lower lows in temperature to more droughts and more floods.

Why Europe Clings to Its CAP *by Doug Martinez* 10

Despite its surpluses and budget overruns, despite market pressures and the risks of a trade war, the European Community remains committed to its Common Agricultural Policy. Some further adjustments in its programs are likely, our analysts say, but don't expect a fundamental change in policy direction.

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Tear out and save this handy telephone guide to key specialists in USDA's Economic Research Service and National Agricultural Statistics Service. The listing is arranged by subject to help you find the right person to answer questions about crops, livestock, farmland values, trade, and other topics.

The Competition Gets Hotter as Meats Battle for Consumers

The poultry industry has expanded steadily with consumer meat demand, filling in any gaps left by beef and pork.

Poultry and red meat producers are battling for the hearts and stomachs of the American people. And, for now at least, the trends favor the birds.

Statistics from USDA's Economic Research Service show per capita U.S. consumption of all meat at record or near-record levels in the mid-1980's. But it is poultry that has scored the big, steady gains in satisfying the American appetite for more meat.

Beef and pork supplies continue to fluctuate with the ups and downs of the cattle and hog production cycles, and neither meat has set a per capita consumption record since the 1980's began.

The consumption figures behind the red meat and poultry competition go back several decades, say economists, though they also caution that the terminology can be misleading. Consumption, in the economic sense, is the amount of meat that "disappears" from the total supply. It is not a measure of the pounds of meat actually eaten, they say. (Obviously, most of the meat is eaten, but per capita consumption is calculated by dividing the population into total domestic "disappearance." No adjustment is made for spoilage, plate waste, bones and other inedible parts, or use of meat in pet foods. All figures cited in this article are, however, adjusted to a retail-weight basis.)

Even if the numbers do not measure exactly what is going into our mouths, they leave no doubt about the trends and relative consumption levels over time.

In the 1940's, U.S. poultry consumption averaged only 17.5 pounds per person. By 1985, the figure had climbed to 70.1 pounds, a fourfold increase. Last year, poultry set another record estimated at 73.4 pounds per capita. An additional 4.5-pound gain is projected this year, with no sign yet that use is leveling off, says Allen Baker, an economist and poultry analyst for ERS.

In contrast, total red meat consumption (excluding edible offals) rose from around 124 pounds before World War II to a peak of 156.7 pounds per person in 1971. Since then, it has dropped more than 20 pounds.

Ranking the Meats

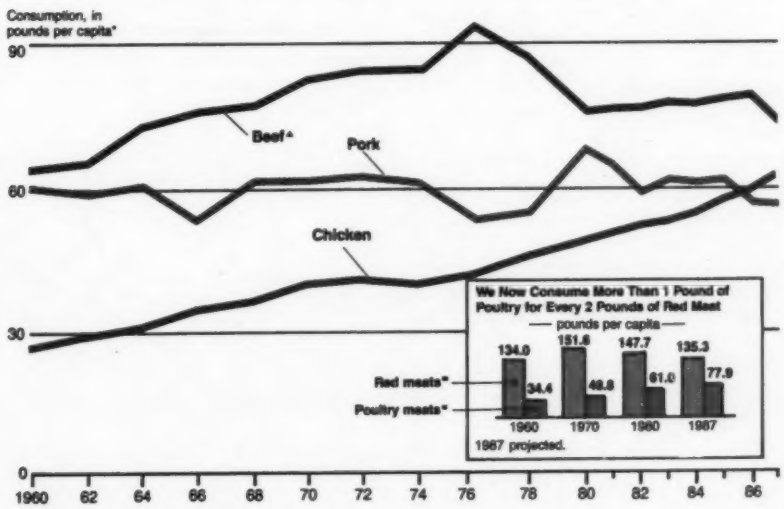
Chicken dominates the poultry category, accounting for around 8 of every 10 pounds of poultry consumed. Per capita consumption of chicken may exceed 62 pounds this year, up 18 pounds in the last 10 years alone. The rapid growth has put chicken in direct competition with the traditional U.S. favorites, beef and pork.

With few exceptions, annual consumption of pork has fluctuated between 55 and 65 pounds a person for nearly a century. It was 62 pounds in 1985 and declined to an estimated 58.5 pounds last year because of the nation's reduced inventory of hogs and also because producers began to hold back gilts and sows from slaughter to rebuild their herds.

Beef shifted ahead of pork consumption in the late 1950's when the industry moved toward large-scale cattle feedlots. Beef reached a record 94.4 pounds in 1976 and then declined. From 1980 to 1986, beef consumption increased again, rising from 76.5 pounds a person to 79.8 pounds, but a sharp drop to a projected 73.9 pounds is anticipated this year, says economist Ron Gustafson, an ERS cattle analyst.

The reason: The overall rate of herd liquidations has slowed. Cattle producers are be-

While Beef and Pork Consumption Fluctuates, Chicken Rises Steadily



1986 preliminary, 1987 projected as of February 1987.

*Retail-weight basis. ▲Excludes edible offals. *Red meats data include beef, veal, pork, and lamb. Poultry meats data include broilers, mature chicken, and turkey.

Pork and beef producers are fighting back with slick, new advertising campaigns to rekindle consumer interest in their products . . .

ginning to stabilize their herds, resulting in near-record lows in the number of cattle available for slaughter.

These divergent patterns for beef, pork, and chicken have raised some questions about whether the rankings of America's three most popular meats have changed. The most commonly cited per capita consumption data show overall poultry bypassing pork in 1982, chicken alone moving ahead of pork in 1986, and overall poultry possibly shifting ahead of the number one meat, beef, this year.

But comparisons between meats are difficult, note the analysts. Chicken, for example, has more retail bone weight, on average, than beef or pork. A new consumption index comparing edible weights, which exclude bone, suggests that pork was still number two as of last year and that beef still commands an edge over total poultry.

Production, Price, or Preference?

Whatever set of data is used, though, the momentum is clearly behind poultry. And that raises a question even more important than the rankings: Why is poultry gaining more space on the American plate?

Production and price explain 95 percent of this shift, says Gustafson, and most economists seem to agree. Poultry production has expanded steadily, filling in any gaps left by beef and pork producers, who have faced unsettling changes in recent years. For example, beginning in 1975, the United States experienced the largest beef herd liquidation on record. At first the additional slaughter put more beef on the market, raising per capita consumption to the 1976 high. But today's significantly reduced herd means less beef on the table.

Moreover, the usual economic incentives for expansion in both the beef and hog sectors have been forestalled by poultry's big gains, several years of drought in cattle-raising areas, and the impact of high debt loads and faltering land values. Poultry producers have generally escaped the economic crunch.

Price, of course, is another key part of poultry's success story. "The retail price of poultry is firmly below that of beef and pork, resulting in a very strong price effect on consumer demand," says ERS economist John Ginzel.

The poultry industry has held onto its consumption windfalls not only through lower retail prices, but also by expanding existing product lines and introducing new items. Such growth is likely to hinder the ability of red meat to expand its market share, particularly at higher prices, say the analysts.

Poultry has an advantage in the competition. The pork and beef industries include thousands of independent operators. In contrast, relatively few producers (45 firms) grow 90 percent of the poultry, and most of them are vertically integrated, says poultry specialist Baker.

Companies like Tyson Foods, Perdue, and Holly Farms control the production, packaging, distribution, and promotion of their products. Therefore, they can take full advantage of any cost reductions and economies of scale. Additionally, this control allows them to more easily establish consumer identification and brand loyalties.

The nature of the red meat industry—especially beef with its diverse enterprises and large number of relatively small producers—precludes such integration. As a result, the industry has less control over the marketing of its products. Instead of the streamlined path followed by the products of large poultry companies, retail beef cuts follow a winding path from cow-calf farm to local grocery store.

For example, a cow-calf producer might sell 400-pound weaned steers to a stocker-operator, who "stocks"—or grazes—cattle on pasture until they weigh 600 to 800 pounds. That producer could then sell the steers to a feedlot for finishing to a weight that will grade Choice—usually 1,000 to 1,200 pounds. A packer would then buy the finished animals and prepare and package the carcasses for retail.

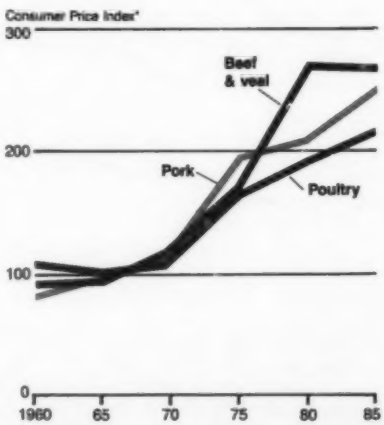
This changing of hands is further complicated by longer biological production periods. Compared with chicken—a broiler can reach the grocery shelf 2 to 3 months after conception—cattle average 30 months from conception to slaughter, and hogs 7 to 9 months. These lags make it difficult for livestock farmers to respond quickly to marketplace changes—a handicap poultry producers do not face.

A Change In Tastes, Too?

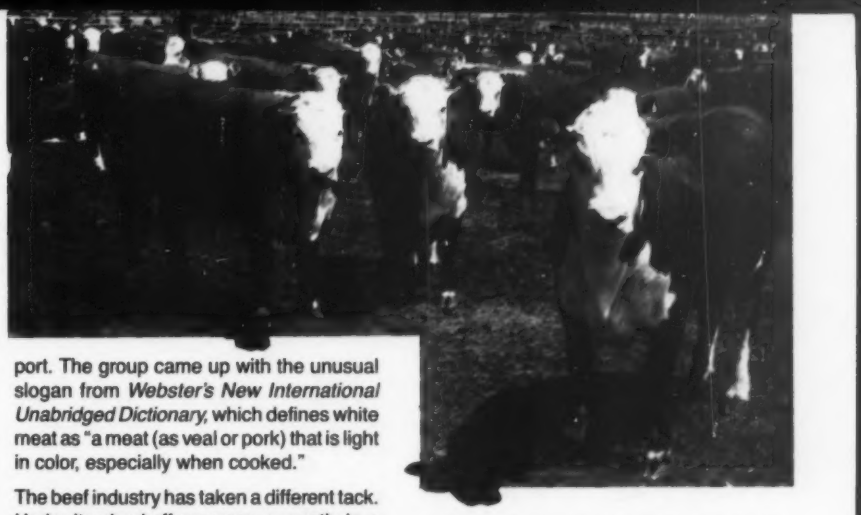
A glance at many newspapers and magazines, however, suggests changing preferences and tastes are also a factor. In consumer-oriented articles and food and health guides, poultry has been touted as a lighter and less fatty alternative to the traditional red meat cuts. While not necessarily true, this has benefited poultry producers, who have targeted active, time-conscious consumers wanting healthful, appealing, and easily prepared foods.

Poultry producers and manufacturers have introduced new products such as chicken

Beef and Pork Prices Climb at a Faster Rate, Widening Poultry's Price Advantage



*Food at home index, with base year 1967 = 100 for each item.



. . . but, while beef and pork attempt to win back some lost loyalties, no one expects the poultry industry to rest on its laurels.

planks and nuggets, and pre-cooked and packaged roasters to meet this demand. The industry has also pursued successful promotions to encourage food establishments to offer more poultry dishes.

As Patrick J. Luby of Oscar Mayer Foods said at USDA's Agricultural Outlook Conference last December: "The poultry industry has given consumers what they want . . . nutrition, consistent high quality, convenience, increased availability, and increasingly good product presentation and palatability."

The ERS economists agree that, as new products are developed, changing tastes and preferences play some role in the demand equation. But they also suggest that consumers are now exposed to a wider variety of meats, including more poultry products. "What we are seeing is consumers exercising their right of choice more than ever before," says poultry analyst Baker.

Nonetheless, the poultry industry's aggressive and innovative tactics have taken full advantage of penny-wise consumers, their changing lifestyles, and their health-conscious shift toward lighter, leaner meats. And now, the red meat industries are fighting back.

The Battle Joined

National organizations representing beef and pork producers are mounting slick, new advertising campaigns aimed at rekindling consumer awareness and interest in their products. Red meat promoters are taking advantage of checkoff funds created by the 1985 farm bill. The campaigns are similar to the recent promotions waged by the dairy industry.

The new theme introduced by the National Pork Producers Council last year seems aimed at taking advantage of some of poultry's success in cultivating favorable public perceptions of light, white meats. The $4.5 million campaign, starring former Olympic ice-skating champion Peggy Fleming, is focused on the slogan, "Pork, the Other White Meat."

The council said a survey of 3,000 consumers showed the campaign had strong support. The group came up with the unusual slogan from *Webster's New International Unabridged Dictionary,* which defines white meat as "a meat (as veal or pork) that is light in color, especially when cooked."

The beef industry has taken a different tack. Under its checkoff program, currently in a trial period, producers pay $1 for each animal sold. The per-head charge goes into a fund administered by the Beef Industry Council's Beef Promotion Board to promote beef as a healthful food. To persuade consumers to identify with its new slogan, "Beef—Real Food for Real People," the group hired two Hollywood personalities, Cybill Shepherd and James Garner. Many of the print advertisements feature recipes for easily prepared beef dishes that cater to changing consumer lifestyles.

The promotion board has also put considerable emphasis on beef as a valuable source of nutrients, such as iron and vitamin B_{12}, that could be lacking in diets low in red meat. The group also points to favorable findings of various studies, including 1986 USDA figures showing that 100 grams of raw, lean beef contain approximately 60 milligrams of cholesterol, while the same amount of raw chicken, with skin intact, contains 75 milligrams.

In addition, specific brands of beef geared to the light, lean trend are cropping up. Supermarket chains like Giant and Safeway have introduced their own lean house-brands. Specialized "designer" brands targeted toward consumers wanting a specific product are proliferating. Some of these brands, such as Lean Limousin and Certified Natural Lite Beef, provide customers with a leaner meat. Others, such as Certified Angus Beef and Coleman Natural Beef, are aimed more at consumers wanting a premium or specially grown "Choice" beef.

USDA now allows producers to label such beef as "extra lean" if it contains less than 5 percent fat. Beef containing less than 10 percent fat can be called "lean" or "lowfat."

While beef and pork attempt to win back some lost loyalties, no one expects the poultry industry to rest on its laurels. Its ability to hold down prices, introduce innovative products, and respond to consumer wants will probably allow further gains. Moreover, the industry is unlikely to back down even if it faces more competition when beef and pork production rises cyclically, says Baker. Poultry growers have high fixed costs that encourage maximum production, and most are big enough to insulate themselves from short-term declines in their markets, he explains.

To better compete, one area the beef industry may concentrate on is reducing production costs, says cattle analyst Gustafson. There already is a considerable forage base in this country. As marginal land is taken out of crop production, pasture and grazing will become even more abundant, he predicts.

The industry could revert to the beef production method of the first half of this century when cattle were grazed to heavy weights—only this time they will go into feedlots for final finishing. Even if feed prices remain low, stocker-operators, with their large supplies of forage, may retain a cost advantage competing against feedlots for the smaller supply of lightweight feeder cattle, Gustafson says. But, he adds, all cattle producers must hold down their production costs, including feeder cattle costs, to compete with the large supply of lower priced alternative meats.

No matter how it breaks out, the battle over the American meat budget will continue. According to the analysts, the long-term result is likely to be further increases in production efficiency, as well as a wider variety of meat products. □

[*Based largely on information provided by economists Ron Gustafson, Allen J. Baker, and John Ginzel of the National Economics Division, Economic Research Service.*]

Signs of a Shift in Weather's Behavior

Weather has been both friend and foe to agriculture since early man planted the first seed. Most farmers accept weather's fickle nature, its pleasant and unpleasant surprises, with few complaints.

More recently, however, some farmers have begun to ask if weather hasn't become a bit more capricious than it used to be a decade or so ago. And some experts say they could be right.

USDA's chief meteorologist, Norton Strommen, claims the nation has been experiencing higher highs and lower lows in temperature, more droughts, and more flooding.

"Variations in temperature and precipitation appear to be wider and more frequent today than in many previous decades. More temperature extremes have been recorded in the late 1970's and the 1980's than during the 1950's, 1960's, and early 1970's," Strommen says. "Record-breaking temperatures have been observed by an unusually high number of weather stations."

One example of the weather extremes of the 1980's is last year's drought in the Southeast. Its severity can be measured by the Palmer Drought Index, a climatological tool devised by meteorologist Wayne Palmer in 1964 to look at past droughts. Palmer identified four categories of drought intensity—mild, moderate, severe, and extreme. He assigned each category a numerical value.

According to the Palmer Drought Index and precipitation records, the Southeast had the worst drought in more than 100 years last spring and summer, says meteorologist Lyle Denny of the Joint Agricultural Weather Facility in Washington, D.C. Affecting parts of Georgia, Alabama, Tennessee, North and South Carolina, and southwest Virginia, the drought registered a -6 to near -7 in western North Carolina and eastern Tennessee, the maximum negative values on record.

This drought was preceded by two major droughts that hit the Corn Belt in 1980 and 1983, but hot, dry spells haven't been the only signs of weather's erratic behavior. There have been floods and early freezes, as well as seasons of exceptionally good weather in some regions.

The volatility and increased frequency of weather extremes have, of course, left their imprint on U.S. agriculture. Average corn yields nationwide, for instance, have taken a rollercoaster ride, dropping 17 percent in 1980, hitting a record high in 1982, falling 28 percent in 1983, and setting two consecutive records in 1985 and 1986. And Florida's citrus crop has been devastated by four freezes in the last 5 years. "We've been keeping records since 1895, and never have we recorded four severe freezes in 5 years," Strommen says.

Erratic Weather: Here To Stay?

Although weather in the 1980's is more erratic than that seen in the 1950's through early 1970's, Strommen suggests that recent high variability may be closer to the historical norm rather than the exception. Other major swings in temperature have occurred, other records have been set in other decades.

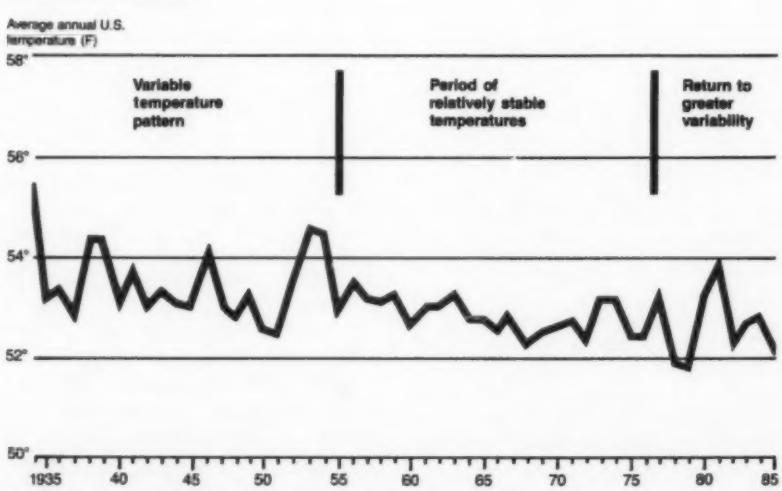
In his view, the 1950's through early 1970's represented a "unique" period in this century, one in which weather was unusually stable. And now? "We're going back to greater variability."

Yet it's too soon to characterize the apparent change as a long-term shift in weather patterns, Strommen says. One decade of capricious weather does not necessarily mean more decades of the same.

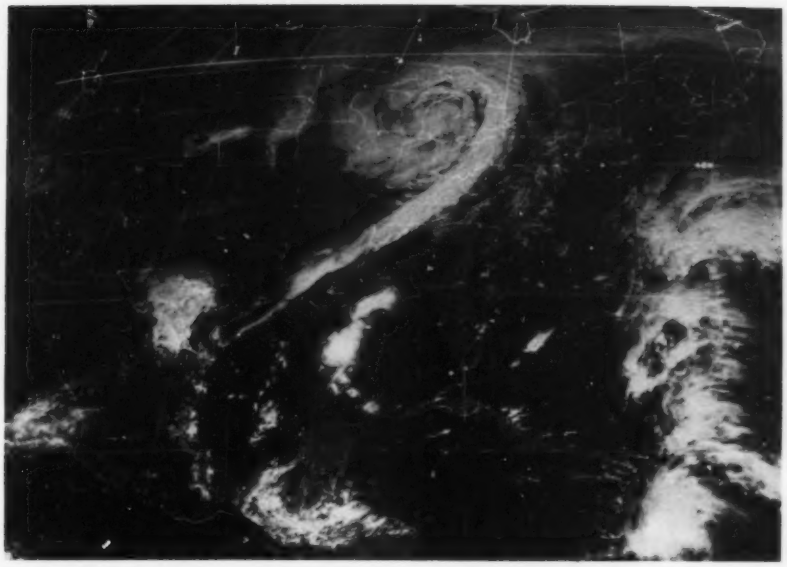
Moreover, any forecast into the years ahead would be pure speculation. Despite its many achievements, the science of meteorology does not have the know-how to pinpoint the causes or predict the duration of broad shifts in weather patterns. "The fact is we don't really know whether we're witnessing a fundamental change in weather, a return to past trends, or just a temporary period of extremes," Strommen says.

He explains that climatologists do not yet fully comprehend the complex interaction of variables that produce weather and climate. They are not able to explain in mathematical terms, for instance, the exchange of energy between ocean and atmosphere, two critical elements of the climate system. Because climatologists do not fully under-

The Temperatures of Recent Years May Represent a Return to More Variable Patterns of the Past



Source: National Climatic Data Center, Asheville, North Carolina.



stand and cannot yet quantify these and other phenomena, they are not able to construct computer models that produce accurate long-range predictions, he says.

Meteorologist Donald Gilman of the National Weather Service agrees. Gilman points out the hazards of assuming that fundamental changes are occurring, given the lack of better forecasting technology. "It's like being on a gently sloping road with lots of potholes. All you may notice is the potholes," he says.

More Theories Than Answers

However, there are theories on why weather seems to have taken a turn for the worse in some places. One explanation involves the El Nino, a periodic incursion of warm water along the northwest coast of South America. It can shift rainfall patterns and cause a seesaw of air pressure from east to west.

The El Nino events of 1982-83 were the strongest on record, Strommen says, causing global climate anomalies. Both South Africa and Australia, for instance, experienced droughts in this period that devastated crops. The trouble is that scientists do not know what causes El Nino events, so they cannot predict with certainty when they will take place.

Many other theories to explain or anticipate shifts in weather have also been offered, none yet proven. Some of the most common are:

- A gradual warming of the Earth's climate may be taking place, possibly because more carbon dioxide is entering the atmosphere as more coal, oil, and other fossil fuels are burned. Carbon dioxide hampers the atmosphere's ability to release outgoing terrestrial radiation. Trapped radiation can warm the Earth's surface temperature. Even if true, though, this "greenhouse effect" still doesn't explain year-to-year changes in temperature.

- Ozone, methane, and other trace gases are being emitted into the atmosphere in larger quantities. These trace gases have proven to be an effective trap for outgoing radiation, perhaps having an even greater warming effect on the Earth's climate than carbon dioxide.

- The energy exchange between ocean surfaces and the atmosphere may explain why recent winters in the United States have been colder. Studies show that when a warm pool of ocean water is present over the north central Pacific, a ridge of high pressure will move over the eastern part of the Pacific and western United States. As a result, cold air is funneled out of Canada and into the United States. However, identical conditions have been present in other decades without causing colder winters, Strommen says, making this theory imprecise at best.

- An increase in volcanic activity, particularly a major eruption, can affect the climate by propelling tons of debris into the atmosphere, to be carried by air currents around the globe. Volcanic eruptions to occur in this decade were at El Chichon in Mexico and Mount St. Helens in Washington.

"All the atmospheric and climatological events behind these theories are bits of the puzzle that we're trying to sort our way through," Strommen says.

"The fact is we don't really know whether we're witnessing a fundamental change in weather, a return to past trends, or just a temporary period of extremes."

While meteorologists strive to expand their understanding of weather and their forecasting tools, farmers must still cope with weather's uncertainties and sudden swings. Not everyone thought this would be necessary in the late 20th century.

No Discounting Weather's Role

In the 1950's to early 1970's, a period characterized by rapid technological advances and relatively good weather, some optimists suggested that technology had largely eliminated significant yield variations in agriculture. Everyone realized later, when bad weather returned, that technology alone could not consistently produce high yields without nature's cooperation, Strommen says.

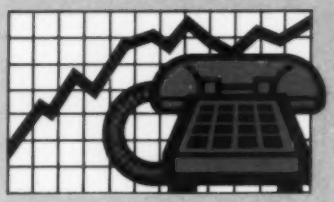
Weather's continuing importance was recently confirmed in a study of factors influencing corn yields in the ten major producing states from 1955 through 1986. Which factor had the greatest impact on yields? According to USDA economists Michael Hanthorn and Harry Vroomen of the Economic Research Service, precipitation and temperature had the greatest year-to-year impact. Fertilizer use and other technologies also significantly increased yields over the 32-year period.

Although meteorologists don't expect weather's role to diminish significantly in the next few years, they do express confidence that forecasting will become more accurate. "A lot is going to be learned in the next 5 to 10 years," Gilman says. Forecasts, especially 30-day forecasts, will be better. That's because the big mathematical models used to predict the movements of air and ocean currents will be pushed to predict temperatures beyond the current 5th-day limit.

"How far can we push them? How far can we trust them in advance? These are the major research and development efforts in forecasting," Gilman says.

Gilman and Strommen are both optimistic that weather scientists will eventually have better tools to determine if long-term weather patterns are changing, to measure the significance of such changes, and to identify with certainty some of the causes behind them. □

Dialing Up Economic Information



Need economic information or data on today's, tomorrow's, or even yesterday's agriculture? The economists, statisticians, and other specialists of the Economic Research Service and National Agricultural Statistics Service may be able to help. Here is a brief telephone guide that you can pull out and add to your files. Generally, those listed with an "S" for "Statistics" can give you acreage, yield, production, and stocks data. Those identified with an "E" for "Economics" can help with supply-demand-price questions and other economic issues. All telephone numbers can be reached by dialing area code 202.

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Why Europe Clings to Its CAP

Neither party wanted a trade war, and a compromise was finally reached, say analysts of USDA's Economic Research Service.

They're talking about late January's last-minute settlement of the dispute between the United States and the European Community over corn and sorghum sales to Spain.

These same analysts, however, warn that this settlement does not eliminate key disagreements over agricultural and trade policy. In fact, the stage may be set for further U.S.-EC confrontations that continue to test the ability of both parties to resolve their differences.

Part of the problem is that the United States and the EC are competing for many of the same markets. And part of the problem is that many of these markets have either stopped growing or have been growing more slowly in the last few years.

Yet the source of friction goes even deeper.

On the surface, the EC and the United States seem to share a similar predicament of large farm surpluses, mounting agricultural expenditures, and budgetary restraints. "But the EC remains committed to the basic direction of its agricultural policy," says ERS economist Mark Newman, a specialist in EC agriculture. "That's true despite EC actions trimming quotas on dairy, tightening up standards for grain and beef price supports, and introducing a producer tax to help finance support programs."

Newman explains that an altered market environment and the EC's own internal troubles have not seriously eroded its strong commitment to a self-sufficient, protected agriculture, to unity in farm policy among its members, and to free trade within the Common Market. In two decades, these policies have helped transform it into one of the world's leading exporters, and that, too, is a role the EC is unlikely to abandon.

"They're not going to give up the struggle for a significant share of the world's farm export markets," says Newman. "The EC's aggressiveness as a trade competitor reflects this emergence of an export-oriented agriculture there and its need to find outlets for the surpluses its policies have generated."

The EC is expected to take more steps to try to curb the swelling surpluses and ease the growing strain on its agricultural budget, he says, adding that such actions can probably be characterized as adjustments to EC programs. "I think we'll be disappointed, though, if we hope for any fundamental change in EC policy," Newman predicts.

Memories of Want

Established in 1964, the EC's Common Agricultural Policy (CAP) has shaped and set forth the policies and practices followed by individual farmers and member countries. It has enabled the EC to become a major agricultural producer and exporter and has fostered prosperity for its farmers—despite the disadvantages in some EC countries of small farm size and a northerly climate with a relatively short growing season.

It began as an effort to promote farm trade among several West European nations and to spur the drive toward self-sufficiency in agriculture.

"The CAP was created by a generation of leaders who had gone through World War II and who had seen firsthand the severe postwar European food shortages," says Newman. "These shortages haven't been forgotten by the older generation."

Yet he says the EC has done more than "meet its targets of self-sufficiency. By the mid-1970's, the EC had heavy surpluses in a number of commodities. Because there wasn't the kind of pressure on the EC budget there is today, serious debate over surpluses didn't even begin until the 1980's."

Annual EC expenditures on agriculture now total around $22 billion, with much of it going to provide generous price supports to French, German, English, Spanish, and other European farmers. These supports have encouraged farmers in the now-12 EC member nations to produce all they can—even in the face of surpluses that would ordinarily take away, through lower prices, the incentive to produce.

"I think we'll be disappointed if we hope for any fundamental change in EC policy."

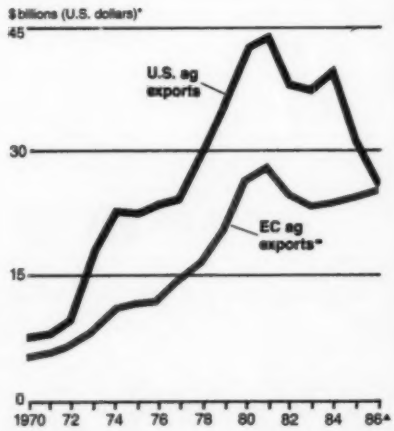
The overproduction persists because the EC itself is the buyer of last resort at high support prices for some products. Sometimes the surplus can be sold. Often, it's simply stored.

The support payments, storage costs, and export subsidies have put increasing pressure on EC finances, Newman says.

As of mid-1986, the most telling example of EC concern over its growing budget had been the partial rollback of support prices for feed grains. Support prices for feed wheat, barley, and sorghum were cut by 5 percent, and further cuts are proposed for this year.

The weaker U.S. dollar and new U.S. farm bill (the Food Security Act of 1985) were both factors in prompting the EC rollback. By lowering support prices for American farmers—who account for the largest share

Recent Declines Have Heated Up the U.S.-EC Competition for Agricultural Exports



*Figures are from U.N. trade statistics, and do not include farm exports of Spain and Portugal, which joined the then 10-member EC in 1986. *Excludes intra-EC trade. ^Estimated.

of world grain exports—the farm bill has had the practical effect of lowering the floor on world prices. That, in turn, has made it more expensive for governments around the world to maintain support prices paid to their own farmers.

The EC reductions on feed grain prices, however, did not take much pressure off the budget because expenditures on grains, including export refunds, account for less than one-sixth of overall EC farm outlays.

At $6 billion, dairy supports (which make up more than a fourth of the EC's farm budget) provide a larger target.

"In 1984, the EC put a quota on dairy production," says Newman. "That was the first, big attempt to reform costs in dairy."

Late last year, the EC acted again, adopting a plan that will cut milk production quotas nearly 10 percent by April 1989. At the same time, the EC decided to reduce beef production by lowering support prices.

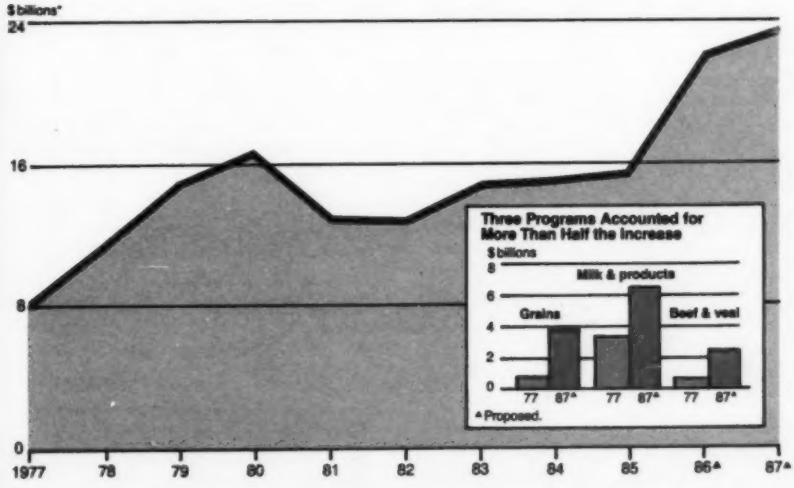
These actions have been especially noteworthy because they were difficult to achieve, says Newman. The EC's decisions are arrived at by consensus, or no binding decision is reached. Unanimous agreement is required for any basic change.

By the Early 1970's, EC Nations Were Near or Above Self-Sufficiency Levels for Most Major Commodities[1]

	Percent self-sufficiency	
	1973	1983
Wheat	104	124
Barley	105	114
Corn	55	78
Sugar	90	141
Fresh vegetables	95	99
Whole milk powder	231	317
Cheese	103	107
Butter	98	147
Beef & veal	96	105[2]
Poultry	102	111

[1] Figures measure production as a percentage of consumption and are from the EC Commission's report, *The Agricultural Situation in the Community, 1985.* [2] 1982 data.

Measured in Dollars, EC Expenditures on Agriculture Have Nearly Tripled in the Last 10 Years



* Figures are from the EC Commission and USDA. ▲1986 expenditures are estimated and 1987 are as proposed.

"In the United States, we tend to respond to the EC as one country, rather than as twelve individual nations," says Newman. "The EC cannot act as easily as a single sovereign nation."

For that reason, the recent EC moves to curb milk and meat output suggest it may be growing more flexible. "These changes can only be considered small, incremental ones," Newman says. "But if the EC keeps making them, things can improve."

The Budget Battle

The "flexibility" may stem largely from member nations' concerns about the EC budget, which is bumping up to, and over, self-imposed limits.

When the EC was created under the Treaty of Rome in 1957, members agreed not to spend in excess of EC revenues. For at least the last 3 years, however, EC officials have been treading delicately on that forbidden line.

"When money earmarked for agriculture in one year's budget has run out, EC ministers have pulled money from other parts of the budget, shifting monies around to finance its farm expenditures," says Newman's colleague, ERS economist Ruth Elleson.

The EC budget may also be at the mercy of events far beyond its borders.

"When world prices fall far below its internal prices, the EC has greater costs," says Elleson. "To remain competitive, the EC generally makes up the difference between the world price and its own price by using export subsidies."

To pay for its export subsidies and other costs, the EC draws its revenues from agricultural levies, customs duties, and a value-added tax (VAT)—somewhat equivalent to a sales tax—of 1.4 percent from member nations.

Here again, EC ministers may take a tough action.

"They've talked about raising the VAT from 1.4 to 1.6 percent," Elleson says. "That could increase the monies now available to the EC by more than 10 percent."

Such a move would also boost already-high

Photo courtesy of The European Community Information Service

consumer food prices in EC nations, but that may not raise the storm of protest it would probably generate here.

"Consumers don't appear to be so vocal there," Elleson says. "The Europeans are used to it, and there are no centralized consumer pressures as there are in the United States. In fact, most of the people pointing out that consumers pay high prices in the EC (to cover price supports) are in Australia and the United States."

Defending the CAP

EC members are willing to pass on the costs of their farm programs to maintain "their policy of preserving the family farm and a strong agricultural sector. Certainly, CAP will change over time, but EC nations are not about to lose it all in one fell swoop. These are wealthy countries and they will find the funds from somewhere to continue CAP," says Elleson.

And with last year's entry into the EC of Spain and Portugal—both heavily tied to agriculture—that commitment seems to have been strengthened.

Another reason for the EC support of farming has little to do with self-sufficiency or preserving the pastoral character of the countryside.

EC members are willing to pass on the costs of their farm programs to maintain their policy of preserving the family farm and a strong agricultural sector.

It is the strictly political factor. Farm groups exercise very strong political power in the EC, and it is agriculture, more than anything else, that now links EC members.

"Agriculture holds the EC together, and they are very committed to it," says Elleson. "It is simply the main way that the EC can be considered a community of cooperating nations. EC officials want the agricultural sector to succeed so that eventually other sectors there can come under the Community's common regulation and financing."

Other nations haven't always understood the depth of this commitment, or known how to respond to the EC's entry into world export markets.

At times, groups in the United States seem to cast the EC in extremes of strength and weakness, Newman says, alternately viewing it as an implacable trade foe or as collapsing into disunity under the burdensome, budgetary weight of its agricultural excesses.

"The truth is that while the EC is a powerful trade competitor, it is also a major market for U.S. farm exports," he says. "And, although it has seen its budget rise sharply because of agriculture, it is taking steps to reduce those increases without altering the key principles of its agricultural policy."

In other words, the picture is more complex than the simple strength-or-weakness, friend-or-foe scenarios. None of this makes it any easier to settle our differences with the EC, Newman admits, "but it does offer a better understanding of what U.S. policymakers may be facing in the years ahead." □

[*Based primarily on information provided by Mark Newman and Ruth Elleson of the International Economics Division, Economic Research Service.*]

AGRICULTURAL ROUNDUP

Past Cycles May Hold Clues to Farming's Future

Photo courtesy of The European Community Information Service

Can the past shed any light on the future of today's troubled farm sector?

Some say the historical record may hold a few clues, particularly since it shows that American agriculture has gone through a series of boom and bust cycles. Although the cycles varied in duration, most of them were strongly influenced by developments in three general areas.

"U.S. farming's financial well-being has depended on the weather, domestic supply and demand, and world economic conditions since before the Declaration of Independence," says historian Wayne Rasmussen, who recently retired from USDA's Economic Research Service. "In more than 200 years, that hasn't changed."

A good place to start looking at these cycles is the Civil War, nearly 130 years ago, Rasmussen suggests.

Military demand during the Civil War created a strong domestic market for farm products. Then, the end of the war brought on an agrarian depression that lasted the rest of the century. Poor weather in the United States and economic depression in Europe, which had been a major export market, also contributed.

The turn of the century brought better times for farmers. The disappearance of the frontier slowed down the amount of new land being put into farming. Land values increased 118 percent between 1900 and 1920. Bad weather in Europe stepped up foreign buying, and a flood of new U.S. immigrants meant that farmers had about a million new mouths to feed each year.

Even the discovery of gold in Alaska, which triggered a mild inflation, benefited U.S. farmers. Demand stemming from World War I put the finishing touches on a period of strong farm profits.

Farmers responded to the boom years in much the same way that many of their grandsons and daughters would later respond to the bullish spirit of the 1970's. They borrowed heavily to expand their operations, and land values soared.

In July 1920, all this came to an end when prices collapsed because of falling exports. Wheat fell from $2.16 a bushel in 1919 to $1.03 in 1921.

"Europe learned a lesson from the war and was determined to work toward agricultural self-sufficiency," Rasmussen says. "It never wanted to be so dependent on imports again, and consequently U.S. exports fell."

Land values also dropped and this, coupled with a sudden tightening of credit, plunged farmers into serious financial problems.

"Although the farm depression of the 1920's looks a lot like today's problems, I would urge caution in drawing any comparison," says Douglas Bowers, an ERS historian. "The farm problems of the 1920's were soon compounded by the Great Depression of the 1930's and the Dust Bowl period, a combination of tragic events that hasn't been seen in this country since."

Although New Deal farm programs began to improve the rural economy in the latter half of the 1930's, it wasn't until World War II that farmers, and the U.S. economy as a whole, fully recovered.

Between 1940 and 1945, war demand raised farm prices almost 90 percent. A bushel of wheat climbed to $1.50, up from 69 cents just before the war. Income per farm rose 92 percent in constant dollars.

Prosperity continued into the postwar era, but American farming was changing. During the war, tens of thousands of people left the countryside for jobs in the cities and never returned. New machinery and technology created a surge in farm productivity that surpassed anything experienced before.

Greater productivity created large surpluses, pushing down prices and income. Falling prices and the inability to buy into the new technology forced some less competitive farmers out of business. In 1940, there were more than 6 million farms. By 1960, the number had fallen to below 4 million, and the farm economy was at the bottom of another downward spiral that had begun after the Korean war.

"It wasn't until the late 1960's that we got rid of the price-depressing surpluses," Rasmussen says. "India had several years of drought and bought heavily from us. Also, the Soviet Union was making large purchases indirectly through other countries. Then, in 1972, the Soviets started making direct purchases, and world demand for U.S. farm products really took off."

The buoyant 1970's were followed, of course, by the bitter reversals of the 1980's—a pattern not uncommon in the historical record. But what, if anything, can the past cycles tell us about the most recent downturn?

"In a sense, you can say it has to get better. History shows us that agricultural problems are cyclical. All cycles do come to an end eventually," Rasmussen says. "The trouble is that history doesn't enable us to predict when the current one will end. You can't say we have 10 years left on this one just because the depressed farm cycle of the 1920's and 1930's lasted about 15 years."

Some economists are suggesting that we've already bottomed out and are starting on a gradual upswing now, he notes, adding that "there is nothing in history to disprove this. The fact is we won't really know the duration of this down-cycle until it, too, becomes part of our past."

America's Foods

Per capita U.S. food consumption increased an estimated 2.2 percent in 1985 to a record level, according to the latest figures in USDA's aggregate food consumption index.

Consumption rose 3.4 percent for crop-based foods and 1.4 percent for animal products.

Historic highs in per capita consumption were set in 1985 by several products and product groups, including poultry, fish, breakfast cereals, peanuts, orange juice, several fresh fruits and vegetables (grapes, bananas, tomatoes, broccoli, and onions), high fructose corn syrup, soft drinks, and wine.

Many other products also registered consumption gains from 1984 to 1985. Among them were beef, pork, the overall dairy products group, rice, and wheat flour.

Per capita consumption declined in 1985 for eggs, whole milk, a few fresh fruits and vegetables (apples, peaches, carrots, sweet corn, and lettuce), canned fruits, refined sugar (which fell to the lowest level on record), coffee, and beer.

This statistical bulletin, covering 1965-85, provides annual per capita consumption data in pounds for dozens of food products and product groups. It also provides data on the supply and use of foods, consumer food expenditures, food prices, and nutrient levels in the U.S. food supply.

Food Consumption, Prices, and Expenditures, 1985 *by Karen Bunch. (Published January 1987; 119 pages, mostly data tables; GPO Stock No. 001-019-00499-1; $5.50.)*

Poultry By the Numbers

The story of the American poultry and egg industry involves an evolution from barnyard flocks to big business, rapid growth in production and demand for poultry meat, and other trends—some favorable and some not so favorable.

Beneath the generalizations, however, it's a story of numbers.

In 151 data tables, this report presents a broad statistical profile of the industry. The tables track such indicators as production, prices and price spreads, storage, trade, and U.S. consumption of chicken, turkey, and eggs from 1960 to 1985.

The following facts and figures were pulled from a few of the tables:

- America's laying hens produced an average of 247 eggs per hen in 1985, up from 209 eggs in 1960. In the first 5 years of the 1960's, total U.S. production ranged from 61 to 66 billion eggs a year. In the first half of the 1980's, the range was 68 to nearly 70 billion eggs.
- Per capita U.S. consumption declined from 320 eggs in 1960 to 255 eggs in 1985.
- After climbing to more than double 1967's prices in 1984, retail egg prices dropped around 17 percent in 1985, based on the consumer price index.
- Production of broilers has increased steadily, rising from 6.0 billion pounds in 1960 to nearly 18.9 billion in 1985. During those years, annual average farm prices for broilers ranged from a low of 13.3 cents a pound in 1967 to a high of 33.2 cents in 1984.
- Estimated costs of feeding broilers to market weight climbed from 8.8-9.0 cents per liveweight pound in 1970 and 1971 to 17.7-20.1 cents in 1980-81. In 1985, however, feed costs were down to an estimated 14.7 cents a pound.
- U.S. farmers raised 185 million turkeys in 1985. That's more than double the number of turkeys raised in 1960. Over the same period, annual turkey meat production rose from nearly 1.5 billion pounds to 3.7 billion, and gross income from this output increased almost fivefold to $1.8 billion in 1985.

Poultry and Egg Statistics, 1960-85 *by Allen Baker and Eunice Armstrong. (Published December 1986; 84 pages of data tables; GPO Stock No. 001-019-00495-9; $4.25.)*

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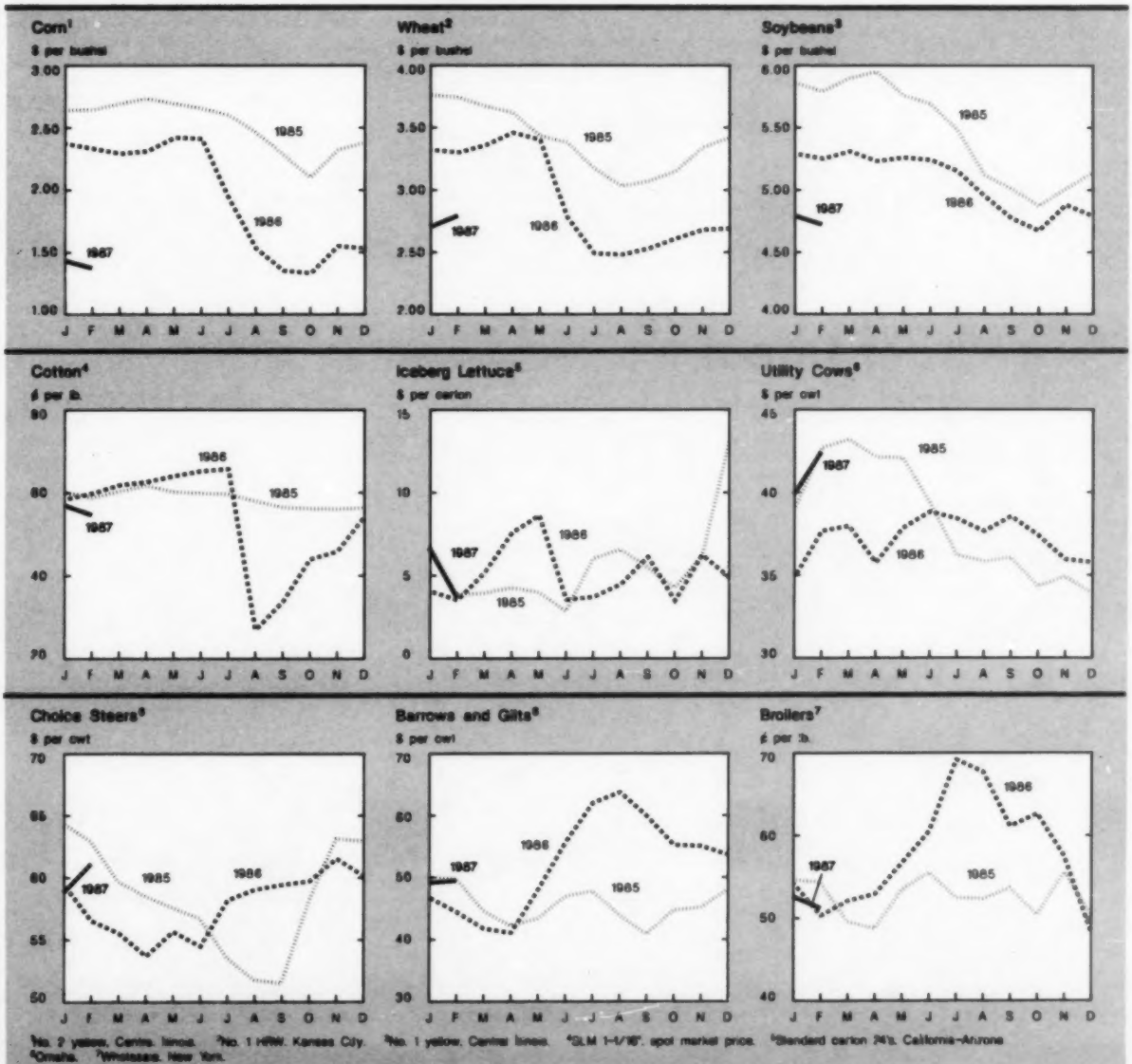
FARMLINE TRENDS

Monthly Price Monitor

USDA's February index of farm prices was unchanged from January and was around 1% below its year-earlier level. Corn declined to $1.38 per bushel, almost $1 below its February 1986 price. Wheat climbed to $2.80, its highest price since the new loan rate went into effect. Soybeans dropped to $4.73 per bushel, and cotton prices slipped to 54.8¢ per lb. In the meat animals area, utility cows jumped to $42.47 per cwt, the first time monthly average prices topped $40 since May 1985. Choice steers rose to $61.16, and barrows and gilts—at $49.62—held fairly steady. Broiler prices declined to 51.3¢ per lb. All prices shown are monthly averages.



[1]No. 2 yellow, Central Illinois. [2]No. 1 HRW, Kansas City. [3]No. 1 yellow, Central Illinois. [4]SLM 1-1/16", spot market price. [5]Standard carton 24's, California-Arizona. [6]Omaha. [7]Wholesale, New York.

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